

IN THE CLAIMS:

1-20. (Canceled)

21. (New) A method for separating sterols from neutral substances comprising the sterols, the method comprising:

- (a) providing a hydrocarbon fraction containing the neutral substances;
- (b) optionally washing the hydrocarbon fraction with water;
- (c) separating the neutral substances from the hydrocarbon;
- (d) evaporation fractionating the neutral substances from step (c) to obtain a sterol-rich fraction;
- (e) dissolving the sterol-rich fraction in a water-containing solvent mixture, and crystallizing the sterols from the solvent; and
- (f) separating the obtained sterol crystals from the solvent.

22. (New) The method of claim 21, wherein the hydrocarbon fraction is prepared by extracting a soap with a mixture of a hydrocarbon and a ketone and/or a lower alcohol as extraction solvents.

23. (New) The method of claim 21, wherein the hydrocarbon fraction is prepared by extracting a soap with a hydrocarbon solvent, and thereafter separating the hydrocarbon phase from the soap phase.

24. (New) The method of claim 23, wherein the extraction is carried out at a temperature of at least 140°C.

25. (New) The method of claim 24, wherein the temperature is between 140°C and 190°C.

26. (New) The method of claim 23, wherein said extracting step is conducted with an extraction mixture comprising the soap, water and the hydrocarbon solvent, which are present in the extraction mixture at a weight ratio of 1 : >1 : >1.

27. (New) The method of claim 26, wherein the soap, water and the hydrocarbon solvent are present in the extraction mixture at a weight ratio of 1 : >1-3 : 2-6.

28. (New) The method of claim 26, wherein the soap, water and the hydrocarbon solvent are present in the extraction mixture at a weight ratio of 1 : 2-3 : 3-6.

29. (New) The method of claim 26, wherein the soap, water and the hydrocarbon solvent are present in the extraction mixture at a weight ratio of 1 : 2-3 : 4-5.

30. (New) The method of claim 21, wherein the washing step (b) is carried out at a temperature between 120°C and 190°C.

31. (New) The method of claim 22, wherein the washing step (b) is carried out at a temperature between 120°C and 190°C.

32. (New) The method of claim 23, wherein the washing step (b) is carried out at a temperature between 120°C and 190°C.

33. (New) The method of claim 21, wherein the evaporation fractionating step (d) is carried out at such conditions that the sterol-rich fraction is obtained as a bottom fraction.

34. (New) The method of claim 21, wherein the evaporating fractionating step (d) is carried out at such conditions that the sterol-rich fraction is obtained as a distillate.

35. (New) The method of claim 21, wherein the hydrocarbon in the hydrocarbon fraction is selected from the group consisting of hexane, heptane, octane, cyclohexane, methylcyclohexane and mixtures thereof.

36. (New) The method of claim 21, wherein the solvent comprises a hydrocarbon and water.

37. (New) The method of claim 21, wherein the solvent comprises a mixture of a hydrocarbon, a C₁-C₆ alkanol and water.

38. (New) The method of claim 37, wherein the C₁-C₆ alkanol is methanol.

39. (New) The method of claim 37, wherein the solvent is a mixture of the hydrocarbon, the C₁-C₆ alkanol and the water, in a weight ratio of 1.5-5 : 0-0.5 : 0-1.

40. (New) The method of claim 39, wherein the weight ratio is 1.5-3.5 : 0.03-0.35 : 0-1.

41. (New) The method of claim 21, wherein in step (e) the sterol-rich fraction and the solvent are present in a weight ratio of 1 : 1.5-6.5, based on the dry weight of the sterol-rich fraction.

42. (New) The method of claim 41, wherein the weight ratio is 1 : 1.5-5.

43. (New) The method of claim 21, comprising the further step of washing the sterol crystals after the crystallizing step (e).

44. (New) The method of claim 43, wherein the crystals are washed with a solvent which is the same as the solvent used in step (e).

45. (New) A process for separating sterols from neutral substances including evaporation fractionation utilizing an apparatus comprising a wiped film evaporator equipped with a rectification column and a short path distillation equipment.

46. (New) The process of claim 45, wherein

the neutral substances are extracted and dried;

the dried neutral substances are fed into a wiped film evaporator equipped with a rectification column;

evaporation fractionation is performed to remove the light fraction of the neutral substances;

the residue is fed into a short path distillation equipment, and a sterol-rich fraction is distilled over; and

the sterol-rich fraction is dissolved in a solvent, and the sterols are crystallized and separated.

47. (New) The process of claim 46, wherein the extraction is accomplished by extracting a soap with a mixture of a hydrocarbon and a ketone and/or a lower alcohol as extraction solvents.

48. (New) The process of claim 46, wherein the extraction is accomplished by extracting a soap with a hydrocarbon solvent, and thereafter separating the hydrocarbon phase from the soap phase.

49. (New) The process of claim 48, wherein the extraction is carried out at a temperature of at least 140°C.

50. (New) The process of claim 49, wherein the temperature is between 140°C and 190°C.

51. (New) The process of claim 48, wherein said extracting step is conducted with an extraction mixture comprising the soap, water and the hydrocarbon solvent, which are present in the extraction mixture at a weight ratio of 1 : >1 : >1.

52. (New) The process of claim 51, wherein the soap, water and the hydrocarbon solvent are present in the extraction mixture at a weight ratio of 1 : >1-3 : 2-6.

53. (New) The process of claim 51, wherein the soap, water and the hydrocarbon solvent are present in the extraction mixture at a weight ratio of 1 : 2-3 : 3-6.

54. (New) The process of claim 51, wherein the soap, water and the hydrocarbon solvent are present in the extraction mixture at a weight ratio of 1 : 2-3 : 4-5.

55. (New) The process of claim 47, wherein the hydrocarbon in the hydrocarbon fraction is selected from the group consisting of hexane, heptane, octane, cyclohexane, methylcyclohexane and mixtures thereof.

56. (New) The process of claim 48, wherein the hydrocarbon in the hydrocarbon fraction is selected from the group consisting of hexane, heptane, octane, cyclohexane, methylcyclohexane and mixtures thereof.

57. (New) The process of claim 46, wherein the solvent comprises a hydrocarbon and water.

58. (New) The process of claim 46, wherein the solvent comprises a mixture of a hydrocarbon, a C₁-C₆ alkanol and water.

59. (New) The process of claim 58, wherein the C₁-C₆ alkanol is methanol.

60. (New) The process of claim 58, wherein the solvent is a mixture of the hydrocarbon, the C₁-C₆ alkanol and the water, in a weight ratio of 1.5-5 : 0-0.5 : 0-1.

61. (New) The process of claim 60, wherein the weight ratio is 1.5-3.5 : 0.03-0.35 : 0-1.

62. (New) The process of claim 46, wherein the sterol-rich fraction and the solvent are present in a weight ratio of 1 : 1.5-6.5, based on the dry weight of the sterol-rich fraction.

63. (New) The process of claim 62, wherein the weight ratio is 1 : 1.5-5.

64. (New) The process of claim 46, comprising the further step of washing the sterol crystals after the crystallizing step.

65. (New) The process of claim 64, wherein the crystals are washed with a solvent which is the same as the solvent used in the crystallization.